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UNS Electric, Inc.

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HQE910

Tucson, AZ 85702-1720

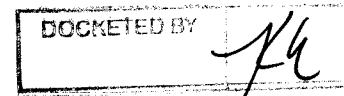
Melissa Morales
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April 1, 2016

Arizona Corporation Commission

DOCKETED

APR 01 2016

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Re: Notice of Filing - UNS Electric, Inc.'s 2016 REST Compliance Report for the year ended 2015, Docket No. E-00000R-16-0084

Pursuant to Arizona Administrative Code R14-2-1812, each Affected Utility shall file with Docket Control a report that describes its compliance with the requirements of the Renewable Energy Standard and Tariff ("REST") Rules. UNS Electric, Inc. hereby files its 2016 REST Compliance Report for year-end 2016.

Because the Report contains confidential information, such information has been redacted from this filing. The un-redacted Report shall be provided directly to Staff pursuant to the terms of the Protective Agreement executed in Docket No. E-00000R-16-0084.

If you have questions or comments please contact me at (520) 884-3680.

Sincerely,

Melissa Morales
Regulatory Services

cc: Compliance Section

AZ CORP COMMISSION
DOCKET CONTROL

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UNS ELECTRIC, INC.

**Response to R14-2-1812 Utility Reporting Requirements
of the
Arizona Corporation Commission**

**COMPLIANCE REPORT AND
RENEWABLE ENERGY DATA
FOR 2015**

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Executive Summary

Compliance with 2015 Renewable Energy Standard (“RES”) Requirements

For calendar year 2015, the Arizona Corporation Commission (“ACC” or “Commission”) established an annual RES requirement of 5.0 percent¹ of the utility’s 2015 retail kilowatt-hour (“kWh”) sales, with 30 percent² of the total requirement to be fulfilled with energy produced from Distributed Renewable Energy (“DRE”) Resources. This separate DRE carve-out provision requires that one-half³ of the total DRE requirement come from residential resources and one-half from non-residential resources. For the purposes of RES compliance tracking, A.A.C. R14-2-1801(N) defines a Renewable Energy Credit (“REC”) as the unit created to track kWh derived from a DRE or kWh equivalent of conventional energy resources displaced by a DRE; however, throughout this Compliance Report, UNS Electric, Inc. (“UNSE” or “Company”) discloses its production in both kWh and RECs.

In 2015, the Company’s total Eligible Renewable Energy Resources, including Annualized Production and Reservations, were 102,837,074 kWh, which is equivalent to 6.3 percent of UNSE’s total 2015 retail sales. Total DRE resources for the year was 40,528,695 kWh. Total Residential actual production was 132 percent of the 2015 residential requirement, and Non-Residential actual production was 200 percent of the 2015 non-residential requirement. UNSE will retire 81,401,750 RECs for 2015 (Actual production of Residential DRE of 16,132,784; Non-Residential DRE of 24,395,911 and 40,873,055 of Non-DRE).

¹ A.A.C. R14-2-1804(B)

² A.A.C. R14-2-1805(B)

³ A.A.C. R14-2-1805(D)

Company's Eligible Renewable Energy Resources

Table 1a shows the following information:

1. Actual energy production⁴
2. Annualized energy production⁵
3. Generation capacity, disaggregated by technology type⁶

Footnotes on table are reflected on page 5.

Table 1a - Renewable Resources								
Resource	Technology	Ownership	MW(AC) ¹	MW(DC) ¹	Production (Actual) kWh	Production: Actual or Annualized ² kWh	Multiplier Credits	Total kWh or Equivalent
Power Purchase Agreements:								
Black Mountain	PV	PPA	7.90	9.87	21,945,300	21,945,300	1.00	21,945,300
Western Wind	Wind	PPA	10.24		24,468,284	24,468,284	1.00	24,468,284
Red Horse Solar		PPA (TEP) ⁵			10,300,083	10,300,083	1.00	10,300,083
Red Horse Wind		PPA (TEP) ⁵			5,276,886	5,276,886	1.00	5,276,886
Manufacturing Credit	PV	Global Solar		0.05	317,826	317,826	1.00	317,826
Gross Total					62,308,379	62,308,379		62,308,379
Adjustment for 10% Wholesale DRE applied to Non-Res requirement ⁶					(2,442,053)			(2,442,053)
Total Production of AC & DC Facilities					59,866,327	62,308,379		59,866,327
Subtotal Capacity AC Facilities			10.24					
Subtotal Capacity DC Facilities including AC Equivalent			7.90	9.87				
Total AC Generation Capacity (excl. manufacturing credits)			18.14					
Distributed Renewable Resources (DRE):								
Residential:								
Incentive, Installed:								
PV	PV	Customer/ Leased		10.00	15,504,987	15,504,987	1.00	15,504,987
H2O	Water Heating	Customer			416,000	416,000	1.00	416,000
Wind	Wind	Customer	0.30		146,261	146,261	1.00	146,261
Total - Incentive Installed			0.30	10.00	16,067,248	16,067,248		16,067,248
Non-Incentive, Installed	PV	Customer/ Leased		5.35	5,597,615	9,630,000		
Non-Incentive, In-Progress	PV	Customer/ Leased		0.86		1,548,000		
Total - Non-Incentive			5.28	6.21	5,597,615	11,178,000		
Gross Total of Eligible Residential DRE					16,067,248	16,067,248		16,067,248
Extra Credits ⁴								
In-State Manufacturing and Installation Content					8,548	8,548		8,548
In-State Power Plant Installation Credit					28,494	28,494		28,494
Distributed Generation Credit					28,494	28,494		28,494
Total Residential Eligible DRE					16,132,784	16,132,784		16,132,784
Subtotal Capacity AC Facilities			0.30					
Subtotal Capacity DC Facilities including AC Equivalent			8.50	10.00				
Total AC Generation Capacity (excl. manufacturing credits)			8.80					

Non-Residential, summations and notes on following page.

⁴ As required by A.A.C. R-14-2-1812(B)(1)

⁵ As required by A.A.C. R-14-2-1812(B)(2)

⁶ As required by A.A.C. R-14-2-1812(B)(3)

Table 1a continued.

Resource	Technology	Ownership	MW(AC) ¹	MW(DC) ¹	Production (Actual) kWh	Production: Actual or Annualized ² kWh	Multiplier Credits	Total kWh or Equivalent
Non-Residential:								
Incentive, Installed:								
PV	PV	Customer/ Leased		7.18	11,116,388	11,116,388		11,116,388
H2O	Water Heating	Customer			352,362	352,362		352,362
Heating	Pool Heating	Customer			463,357	463,357		463,357
Wind	Wind Turbine	Customer	0.01		4,061	4,061		4,061
Total - Incentive Installed:			0.01	7.18	11,936,168	11,936,168		11,936,168
Utility-Owned Installed:								
La Senita	PV	UNSE		1.22	2,096,259	2,096,259	1.00	2,096,259
Rio Rico	PV	UNSE		7.20	10,363,484	10,363,484	1.00	10,363,484
Wholesale 10% of DRE requirements								2,442,053
Total - Other				8.42	12,459,743	12,459,743		14,901,796
Non-Incentive, Installed	PV	Customer/ Leased	1.59	1.87	490,908	3,366,000		
Non-Incentive, In Progress	PV	Customer/ Leased		0.11		198,000		
Total - Non-Incentive			1.68	1.98	490,908	3,564,000		
Total Non-Residential Eligible DRE					24,395,911	24,395,911		26,837,964
Subtotal Capacity AC Facilities			0.01					
Subtotal Capacity DC Facilities including AC Equivalent			13.26	15.60				
Total AC Generation Capacity			13.27					
Subtotal Eligible DRE (B + C)			22.07		40,528,695	40,528,695	-	42,970,748
Subtotal Non-Incentive DRE (G + H)			6.96	8.19	6,088,523	14,742,000		14,742,000
Total RES Resources (A + D)			40.21		100,395,022	102,837,074	-	102,837,074
Total 2015 RES Resources Available for Retirement⁴					100,395,022			100,395,022
Subtotal Capacity AC Facilities			10.55					
Subtotal Capacity DC Facilities including AC Equivalent			29.66	35.47				
Total AC Generation Capacity (excl. manufacturing credits)			40.21					

Notes to Table 1a:

¹ Generation capacity is generally reported in MW(AC) and DRE is generally reported in MW(DC).² Assumes 1,800 kWh per installed kW for non-metered or current year installed residential PV systems, and 1,800 kWh per installed kW for similar non-residential systems.³ Represents the total RES portfolio capacity in MW(AC). An 85% DC-AC conversion factor is applied to all DRE capacity and 80% for utility-scale.⁴ Does not include Annualized Production.⁵ The Red Horse Contract is with TEP and 25% of 2015's production was sold to UNSE.⁶ As allowed by A.A.C. R14-2-1805(E)

Renewable Energy Credit Retirement Summary

Table 1b shows the breakdown of RECs used to satisfy both the annual renewable energy requirement and the DRE requirement⁷.

Table 1b				Compliance Measure (kWh)	Available RECs for Retirement	Carryforward
Retail Sales	Actual Sales for 2015			1,628,035,000		
2015 Carrying Balance					104,224,000	
Residential DE						-
Non-Residential DE						-
Non-DE Balance					104,224,000	104,224,000
2015 Total RES Requirement	% of Retail Sales	5%		81,401,750		
DE Requirement	% of RES Requirement	30%		24,420,525		
Residential DE	% of DE Requirement	50%		12,210,263	16,132,784	-
Non-Residential DE	% of DE Requirement	50%		12,210,263	24,395,911	-
Non-DE	Non-DE Requirement = Total RES Requirement - Residential RECs ¹ - Non- Residential RECs ¹			40,873,055	59,866,327	18,993,272
Total Resources Available for 2015 REC Retirement					204,619,022	
Retirement					81,401,750	
Residential DE					16,132,784	
Non-Residential DE					24,395,911	
Non-DE					40,873,055	
Total 2015 Carryforward ² Balance						123,217,272

¹Includes carryforward balance

²Carryforward RECs + Non-DE RECs - Non-DE Retired RECs

⁷ As required by A.A.C. R14-2-1812(B)(5)

Renewable Energy Standard Incentive Costs

Table 2b shows cost information regarding \$/kWh of energy obtained from eligible renewable energy resources and \$/kW of generation capacity, by technology, that can be attributed to the RES⁹ for 3rd-party projects receiving incentives.

Table 2b

	MW	MWh ¹	Up-Front Incentives					Total Incentives Paid (\$)
			(\$/MW)	(\$/MWh)				
Residential:								
Up-Front Incentives								
PV	0.01	21.60						\$ 1,078.65
Subtotal: Residential	0.01	21.60	\$ -	\$ -				\$ 1,078.65

	MW	MWh ¹	Up-Front Incentives		Production-Based Incentives		Total Incentives Paid (\$)
			(\$/MW)	(\$/MWh)	(\$/MW)	(\$/MWh)	
Non-Residential:							
Up-Front Incentives							
PV	0.51	892.50					\$ 21,629.90
PBI Legacy							
PV	4.67	8,179.50			\$ 158,766.90	\$ 90.72	742,076.47
Subtotal: Non-Residential	5.18	9,072.00	\$ -	\$ -	158,766.90	90.72	763,706.37
Total DRE Incentive Costs	5.20	9,093.60	\$ -	\$ -	\$ 158,766.90	\$ 90.72	\$ 764,785.02

Notes to Table:

¹ Based on expected annual system production. 1800 kWh/kW conversion factor.

⁹ As required by A.A.C. R14-2-1812(B)(4)

ACC Approved Budget

January through December 2015

	Budget
Revenue	
Tariff Revenue	\$ 5,580,006
Carryover from 2013	2,791,292
Income	8,371,298
Expenses	
Utility Scale Energy	
AMCCCG	5,266,131
Total UNSE Owned	1,948,667
Total Utility Scale	7,214,798
Customer Sited Distributed Renewable Energy	
Outreach Efforts	
Production Based Payment	892,297
Meter Reading	6,250
Education Outreach	-
Total Customer Sited DG	898,547
Total Technical Training	37,500
Total Information Services	20,000
Total Labor & Administration	108,088
Metering	91,365
AZ Solar Website	1,000
Research & Development	-
Total Expenses	8,371,298
Net Income	\$ -

RES Revenue Expenses

January through December 2015

	<u>Jan - Dec 15</u>
Revenue	
Tariff Revenue	\$ 6,070,434
Carry forward from Prior Years	2,791,292
Total Revenue	8,861,726
 Expenses	
Purchased Renewable Energy	
AMCCCG	3,229,148
Manufacturing REC Purchase	7,946
O & M	21,677
UNSE Owned	1,823,549
Total Purchased Renewable Energy	5,082,320
Customer Sited DG	776,977
Information Services	20,000
Labor & Administration	
Internal Labor & Fees	95,942
Office Supplies & Other	20,000
External Labor & Reporting	27,195
Total Labor & Administration	143,137
Metering	126,026
AZ Solar Website	686
Technical Training	37,433
Total Expenses	6,186,579
Net Revenue(Loss) for 2015	(116,145)
Carry forward from Prior Years	2,791,292
Net Revenue to Carry forward	\$ 2,675,147

Budget Variance Report

Table 3 shows a breakdown of over- and under-collection of RES budget. Below it is a description of the budget variances that were realized between the ACC approved budget, shown on page 9, and the RES program actual expenses, shown on page 10.

Table 3

Over-Collected Revenues	\$ 490,428
Under-Paid Purchased Power	2,007,361
Under-Paid UNSE-Owned Properties	125,119
Under-Payment of Performance Based Incentives	121,570
Over-Payment of Metering Costs	(35,049)
Other Net Over-Payment	(34,280)
Total Carry Forward to 2017	\$ 2,675,147

- Over-collected revenue was due to allocation differences between various customer rate classes.
- Under budget payment for purchased power was due to the Red Horse II project being switched to the TEP renewable portfolio.
- Under budget costs for UNSE-owned properties were due to overall lower carrying costs than expected.
- Budgeted metering costs were lower than anticipated, because of a greater number of systems being installed. It was originally projected that system installations would decline due to incentives not being offered, but instead there was an increase.
- Other over payments were made up of labor, travel and training, materials, and the solar website.